Valve Gate Controls

ENERGY EFFICIENT, RELIABLE
AND COMPACT HYDRAULIC
AND PNEUMATIC CONTROLS

4-Zone and 8-Zone Timer-Based Sequencers

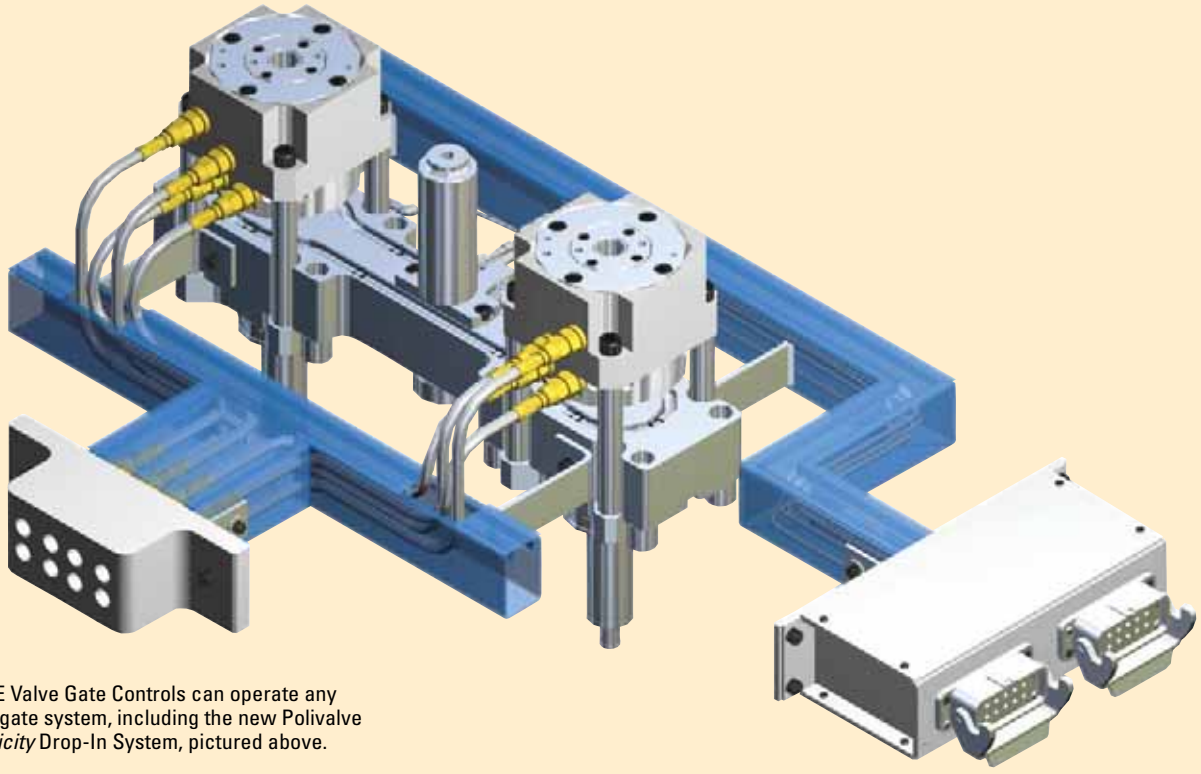
- Solid-state timers and relays have a life rating of 10 million cycles
- Robust power supply
- User-friendly auto-reset function
- Individual test buttons for each zone provide precise time control to .01 second
- Compact design takes up minimal space
- Air-powered operation runs on 120 VAC and an air line
- Accumulator stores precharged oil, allowing for instantaneous operation

Hydraulic and pneumatic valve gate controls provide reliable, accurate and efficient control

Valve gate sequencers from D-M-E are available in pneumatic or hydraulic control for timer-based actuation of up to eight valve gates. Offering faster response than typical valve gate controllers and greatly reduced electrical use over the life of the unit, D-M-E Valve Gate Controls provide reliable, accurate, highly efficient time control for years of use.

Controllers feature highly accurate (resolution to 1/100 of a second) DIN-style solid state timers, individually fused against faults, to provide long life and high reliability. Each timer is capable of dual time functions, allowing each zone to be programmed with a delay-time and an on-time. Test functions for each zone assist in determining the correct hookup of each valve.

The controllers operate from a wide supply of operating voltages (88 to 264 volts AC), making them easy to relocate between different plants or even different countries. The standard product is offered with a 125 volt AC plug (North American Standard). This plug can be removed and replaced with any number of 240 VAC plugs.



D-M-E Valve Gate Controls can operate any valve gate system, including the new Polivalve *Simplicity* Drop-In System, pictured above.

4-Zone and 8-Zone Timer-Based Sequencers

VCTH4000 and VCTH8000: 4-zone and 8-zone hydraulic control

The VCTH4000 provides four zones of hydraulic actuation and the VCTH8000 provides eight zones of actuation.

Hydraulic connections on the back of each controller allow for quick connect and disconnect of the hydraulic lines from the controller. This air-powered unit runs on 88 to 264 volts with a single air line. Because the VCTH pumps only when pressure build-up is required, operation is energy efficient, providing a low-cost energy solution. This style of pump also prevents degradation of hydraulic oil.

A hydraulic accumulator stores precharged oil, which provides on-demand flow for fast actuation of hydraulic cylinders. This powerful hydraulic system can provide up to 10 times the incoming air pressure.

ITEM NUMBER	DESCRIPTION
VCTH4000	4-ZONE HYDRAULIC CONTROLLER
VCTH8000	8-ZONE HYDRAULIC CONTROLLER
VCAH1500	15-FT. LONG HYDRAULIC HOSE ASSEMBLY

Note: Hydraulic hose assemblies and trigger signal cable included with each controller.

D-M-E Valve Gate controllers provide an extended life cycle, energy savings and more accurate time settings.

Compact 4-zone pneumatic or hydraulic control unit

The VCTB4000 Valve Gate Controller is designed to provide timer-based control of up to four 24 volt DC valves used to actuate pneumatic valve gate cylinders as well as some hydraulic valves, and features a user-friendly auto-reset feature. Its compact size makes it extremely portable and requires minimal space. A single DB-025 cable connects the controller to up to four remotely located valves, minimizing wiring and air connections.

ITEM NUMBER	DESCRIPTION
VCTB4000	4-ZONE PNEUMATIC HYDRAULIC CONTROLLER
VCPT0100	100-FT. LENGTH OF PNEUMATIC TUBING

Note: Trigger signal cable included with controller.

Highly accurate D-M-E solid state timers feature resolution to 1/100 of a second, far exceeding the industry standard of 1/10 of a second.

VCAP Air Valve Assemblies

VCAP multi-station air valve assemblies

The VCAP series offers 4-station (0400), 6-station (0600), 8-station (0800), 10-station (1000), and 12-station (1200) valve assemblies. The single-solenoid valves are spring returned and designed to run from 24 VDC +/- 10%. The air supply (maximum rated pressure 145 PSI) can be lubricated or non-lubricated — dry air is preferred but the valve is designed to tolerate some moisture.

Quick connects are provided on all air outputs to accept standard 1/4" tubing. The de-energized outputs, used for closing valve gates, feature check valves to ensure that unused valves do not leak air.

ITEM NUMBER	DESCRIPTION
VCAP0400	4-STATION AIR VALVE ASSEMBLY
VCAP0600	6-STATION AIR VALVE ASSEMBLY
VCAP0800	8-STATION AIR VALVE ASSEMBLY
VCAP1000	10-STATION AIR VALVE ASSEMBLY
VCAP1200	12-STATION AIR VALVE ASSEMBLY

Note: Each valve assembly includes a valve cable.

Technical Support

TECHNICAL SUPPORT: CURRENT LISTING OF ONLINE DOCUMENTS

Visit www.dme.net under D-M-E Americas "North America". Select "Download Documents" – Product Application Guides, Frequently Asked Questions, etc. for the most current listings.

Valve Gate Control Related

Valve Gate Controller User Manual

- VCTH-4000, 8000 Four-Zone and Eight-Zone Timer Based Hydraulic Valve Gate Controller User Manual
- Valve Gate Controller User Manual

Air Valve Assemblies User Manual

- Air Valve Assemblies User Manual

Pressure Control Related

- IPC-01-01 Pressure Control Unit User's Manual (625KB)
- Sensor Cables (54KB)
- Technical Literature for D-M-E Pressure Transducers - Revision 1.1 (16KB)
- A Short Tutorial on Cavity Pressure Transducers Usage 06-22-93 (25KB)

SMART SERIES® Temperature Control Related

Temperature Control Guides Replacement Parts

- Temperature Control Replacement Parts List (ED-0095-PL-001-H) (112KB)

Mainframes

- MFP1G, MFP1G1, MFPR2G, MFFPR2G & MFHP1G Mainframe User's Manual (427KB)
- MFP5G, MFP8G, & MFP12G Mainframe User's Manual (660KB)
- MFP5G, MFP8G, & MFP12G Mainframe User's Manual (Chinese Version) (3.15MB)
- MFHP2G, MFHP3G, & MFHP5G High Power Mainframe User's Manual (742KB)
- How to Calculate the Required KVA Size Needed for a D-M-E Single Phase Power Transformer (4KB)
- How to Calculate the Required KVA Size Needed for a D-M-E Three Phase Power Transformer (6KB)
- "G" Series Mainframe Replacement Parts
- Power and Thermocouple Cables

Temperature Controls

- SSM-15-11, SSM-15-12 & SSM-30-12 Temperature Control Module User's Manual (690KB)
- SSM-15-01, SSM-15-02 & SSM-30-02 Temperature Control Module User's Manual (447KB)
- SSM-15-01, SSM-15-02 & SSM-30-02 Temperature Control Module User's Manual (Chinese Version) (1.73MB)
- SSM-15-G & SSM-30-G SSMX-15-G & SSMX-30-G Temperature Control Module User's Manual (141KB)
- DSS-15-11, DSS-15-12 & DSS-30-12 Temperature Control Module User's Manual
- Old DSS-15-01, DSS-15-02 & DSS-30-02 Temperature Control Module User's Manual (222KB)
- DSS15G Temperature Control Module User's Manual (681KB)
- CSS-15-02 & CSS-30-02 Temperature Control Module User's Manual (242KB)
- CSS-15 & CSS-30 Temperature Control Module User's Manual (750KB)
- CIM-01-01 & CIM-01-02 Computer Interface Module User's Manual (114KB)
- CIM-10-G & CIM-10-GS Computer Interface Module User's Manual (743KB)
- SSH-10-01 & SSH-10-02 Temperature Control Unit User's Manual (522KB)
- SSH-10-21, SSH-10-22 & ESH-10-22 Temperature Control Unit User's Manual (427KB)
- SSH-10-11, SSH-10-12 & ESH-10-12 Temperature Control Unit User's Manual (427KB)
- TAS-05-02 Temperature Alarm & Stand-by Heat Module User's Manual (310KB)
- TAS-05-11, TAS-05-12 Temperature Alarm & System Control Module User's Manual (284KB)
- SMP/CMP Microprocessor Temperature Control Modules Technical Manual (obsolete product) (1.24MB)
- SMP/CMP Calibration Procedure
- Series 965 - 1/16 DIN Microprocessor-Based Auto-tuning Control User Manual (1.97MB)

Frequently Asked Questions - Temperature Controls

- Temperature Control Guides - Frequently asked questions
- Temperature Controls - Not Heating Up/SHI/Anti-Arc Clips Problems
- Selecting Connectors for a 2-Zone MFPR2G
- Selecting Connectors for a SSH Hookup Diagram

Technical Support

TECHNICAL SUPPORT: CURRENT LISTING OF ONLINE DOCUMENTS

Integrity™ Temperature Control Related

- INTEGRITY™ Control System User's Guide

TECHNICAL SUPPORT: MISCELLANEOUS

General Transformer Rules of Thumb (Typical 3 Phase, 3 Wire Delta Type Power Connection)

- Heavy Duty Main Frame Stands required with Transformer Kits above 15 KVA.
  (1 KVA transformer rating = 1000 Watts of Resistance Heater Loads)
- Typical Modules Requirements
  - 15 amp 240 VAC modules rated at 3600 Watts Maximum
  - 10 amp 240 VAC modules rated at 2400 Watts Maximum
  - 5 amp 240 VAC modules rated at 1200 Watts Maximum
- Effects of Line Voltage Supply
  - If resistive heater is rated 1,000 Watts at 240 Vac, its Effective Wattage will be:
    - 750 Watts at 208 VAC drawing 3.6 amps
    - 840 Watts at 220 VAC drawing 3.82 amps
    - 1,000 Watts at 240 VAC drawing 4.17 amps
    - 1,210 Watts at 264 VAC drawing 4.58 amps
- each 100 amp breaker uses 45 KVA minimum for full available power to frame
  (can supply 15 KVA or 15,000 Watts per phase, zones balanced on the 3 phases.)
  - 45 KVA / 12 zones = 3,750 Watts available per zone
  - 45 KVA / 24 zones = 1,875 Watts Average available per zone
  - 45 KVA / 48 zones = 937.5 Watts Average available per zone
- each 70 amp 3 phase breaker uses 30 KVA minimum for full available power to frame
  (can supply 10 KVA or 10,000 Watts per phase, zones balanced on the 3 phases.)
  - 30 KVA /12 zones = 2,500 Watts Average available per zone
  - 30 KVA /24 zones = 1,250 Watts Average available per zone
  - 30 KVA/48 zones = 625 Watts Average available per zone
- each 50 amp 3 phase breaker uses 22.5 KVA min. for full available power to frame
  (can supply 7.5 KVA or 7,500 Watts per phase, zones balanced on the 3 phases.)
  - 22.5 KVA /12 zones = 1875 Watts Average available per zone
  - 22.5 KVA /24 zones = 916 Watts Average available per zone
  - 22.5 KVA/48 zones = 468 Watts Average available per zone

Returning Items to D-M-E U.S. for

- Repairs

  You can send temperature control repairs and modules needing calibration to:

  D-M-E Repairs
  1419 State Route 45 South
  Austinburg, Ohio 44010

  Please enclose contact information and a description of what problems you have been experiencing with the product. Module repairs are a fixed price. Cable and main frame repairs depend on what needs to be serviced. Warranty service is also covered via this method, however, module fuses and triacs are not covered.

- Return for Credit

  Call D-M-E USA at 1-800-626-6653 or D-M-E Canada at 1-800-387-6600 toll free

D-M-E U.S. Custom Quote Procedures

- Cables
- Special Mainframe Requirements
- Contact Thom Linehan at 248-544-5027 or email at thom_linehan@dme.net

D-M-E: Your Complete Mold Technologies Provider

Every step of the way

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D-M-E Mold Bases & Plates

Choose from the world's widest selection of mold bases from uniquely featured, off-the-shelf solutions to full-featured, custom-configured offerings. An array of standard and specially machined mold plate sizes gives you unlimited options.

CATALOG: 156 PAGES

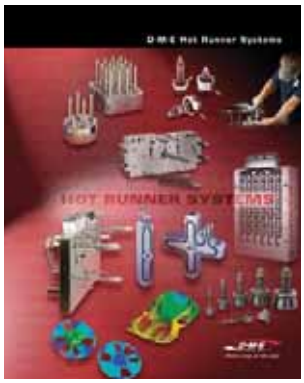
MUD Quick-Change Systems From D-M-E

Reduce downtime by as much as 75 percent with an innovative approach to fast production changeovers. Master Unit Die is the leader in quick-change systems and the MUD Catalog offers many systems that will maximize your production volume.

CATALOG: 316 PAGES

D-M-E Mold Components

With the largest selection of mold components available around the globe, the D-M-E Mold Components Catalog has the products that will help you meet the unprecedented demands you face for speed, cost reduction and performance.



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D-M-E Hot Runner Systems

Moldmakers, molders and mold designers worldwide look to the D-M-E Hot Runner Systems Catalog for essential hot runner solutions. From best-in-class components to complete, fully-functioning hot half systems, D-M-E has the broadest range of hot runner products and services.

CATALOG: 76 PAGES

D-M-E Equipment and Supplies

From high-speed cutting tools and finishing and polishing systems to a vast array of maintenance, repair and operation-related products, the D-M-E Equipment and Supplies Catalog is an invaluable resource for mold technology professionals.

CATALOG: 68 PAGES

D-M-E Technical Services

From powerful, online resources available 24/7, to our team of trained, experienced experts committed to helping customers achieve maximum productivity, reliable operation, and better performance, D-M-E's goal is simple: to be an essential resource for your molding challenges every step of the way.

D-M-E, an essential resource to the customers it serves worldwide, offers the industry's broadest range of market-leading products, unsurpassed knowledge and expertise, a global logistics infrastructure that ensures speed and accuracy, and a support organization unrivaled for its ability to assist customers when and where they need it. A complete line of hot runner systems, control systems, mold bases, MUD quick-change mold systems, mold components, moldmaking and molding equipment supplies, and technical services helps customers compete every step of the way.

D-M-E
Every step of the way

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